Application No. 10/647,561

Amendments to the Claims:

The following listing reflects amendments to the claims and replaces all prior versions and listings of claims in this application.

- 1. (Currently Amended) A hydrophilic polymer-peptide conjugate comprising a peptide that is either biphalin or [D-Pen², D-Pen⁵] enkephalin (DPDPE) covalently linked to a water-soluble polymer having a molecular weight from about 2,000 to about 100,000 daltons and selected from the group consisting of poly(ethylene glycol), copolymers of ethylene glycol and propylene glycol, poly(vinyl alcohol), poly(alkylene oxides), poly(oxyethylated polyols), poly(olefinic alcohols, poly(acryloyl morpholine), poly(vinylpyrrolidone), poly(oxazoline), dextran, and poly(hydroxyethyl methacrylate, wherein said conjugate, when administered into the blood circulation of a mammal, is capable of transport across the blood brain barrier is absent non-covalent bonds.
- 2. (Previously Presented) The conjugate of Claim 1, which, when administered to the blood circulation of a mammal, has an extended duration of analgesic effect when compared to the corresponding unconjugated peptide.
- 3. (Previously Presented) The conjugate of Claim 1, wherein said water soluble polymer is absent one or more lipophilic moieties.
 - 4. Canceled.
 - 5. Canceled.
- 6. (Original) The conjugate of Claim 1, wherein said peptide is covalently linked to at least one terminus of said polymer.
- 7. (Previously Presented) The conjugate of Claim 1, wherein said peptide is covalently linked at an N- terminus to said polymer.

Application No. 10/647,561

8. (Previously Presented) The conjugate of Claim 1, wherein said water-soluble, polymer is polyethylene glycol or a copolymer of polyethylene glycol and polypropylene glycol.

- 9. (Previously Presented) The conjugate of Claim 1, wherein said water-soluble polymer is polyethylene glycol.
- 10. (Original) The conjugate of Claim 9, wherein said polyethylene glycol is selected from the group consisting of monomethoxypolyethylene glycol, branched polyethylene glycol, polyethylene glycol with degradable linkages in the backbone, homobifunctional polyethylene glycol, heterobifunctional polyethylene glycol, multi-arm polyethylene glycol, pendant polyethylene glycol, and forked polyethylene glycol.
- 11. (Previously Presented) The conjugate of Claim 1, wherein said peptide is conjugated to a single polyethylene glycol molecule.
- 12. (Previously Presented) The conjugate of Claim 1, comprising biphalin covalently attached to two polyethylene glycol moieties.
- 13. (Currently Amended) The conjugate of Claim 1 wherein said polymer is polyethylene glycol having a nominal average molecular weight of about 200 2,000 daltons to about 40,000 daltons.
- 14. (Currently Amended) The conjugate of Claim 13 wherein said polyethylene glycol has a nominal average molecular weight of about 1,000 daltons to about 40,000 selected from the group consisting of 2000 daltons, 5000 daltons, 8,000 daltons, 10,000 daltons, 12,000 daltons and 20,000 daltons.
- 15. (Original) The conjugate of Claim 13 wherein said polyethylene glycol has a nominal average molecular weight of 2,000 daltons.

Application No. 10/647,561

16. (Original) A pharmaceutical composition comprising a conjugate according to Claim 1 and a pharmaceutically acceptable carrier.

- 17. (Previously Presented) The conjugate of Claim 1 further comprising a neuroactive agent, which may be the same or different from said peptide, conjugated to said polymer.
- 18. (Previously Presented) The conjugate of Claim 17, wherein said polymer is a linear polymer having a first terminus covalently attached to said peptide and a second terminus covalently attached to said neuroactive agent.
- 19. (Previously Presented) The conjugate of Claim 1, further comprising doxorubicin or an imaging or diagnostic agent conjugated to said polymer.
 - 20. (Canceled).
 - 21. (Canceled)
 - 22. (Canceled)
- 23. (Previously Presented) The conjugate of Claim 1 wherein said peptide is biphalin.
- 24. (Previously Presented) The conjugate of Claim 1 wherein said peptide is DPDPE.
 - 25. (Canceled)
- 26. (Previously Presented) The conjugate of claim 1, wherein said polymer is absent fatty acids and glycolipids.

Application No. 10/647,561

27. (Previously Presented) The conjugate of Claim 1, wherein said polymer is poly(ethylene glycol) having the formula - CH_2CH_2O -(CH_2CH_2O)_n- CH_2CH_2 -, wherein n ranges from about 10 to 2000.

(This space intentionally left blank)